DRAFT STUDY

HOST COMMUNITY COMPENSATION STUDY ASSOCIATED WITH THE PROPOSED KEKAHA LANDFILL EXPANSION KEKAHA, KAUA'I, HAWAI'I

Prepared for

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1. INTRODUCTION

This study provides a review of Host Community Compensation (HCC) efforts around the country and proposes an approach for the County of Kaua`i Department of Public Works (DPW) to consider with regard to offering HCC to the community of Kekaha as part of the proposed lateral expansion of the Kekaha Landfill (KLF) located in Kekaha, Kaua`i. In general, this study focused on the following:

- An overview of HCC
- Background and reasons to consider HCC for the community of Kekaha
- Results of HCC research conducted
- Recommended approach for HCC for Kekaha

2. HOST COMMUNITY COMPENSATION OVERVIEW

HCC is a concept that is being utilized for the siting of "locally unwanted land uses", which landfills are considered. Communities do not want them located in their area and feel disproportionately burdened by them. Landfills also cause tension within the community involved and political conflicts between the agencies and communities involved. While it is inevitable that landfills will burden someone, HCC is a way to try and offset this burden. It is also an increasingly popular concept that is used to resolve conflicts arising from landfill siting or expansion and to minimize perceived losses to the parties involved.

HCC packages for landfill host communities are generally unique to each situation and try to equitably balance the perceived sacrifices of the host community and the undocumented benefit to those who do not live as the landfill's neighbor. The general perception is that there is no win-win situation; however, there is always opportunity to attempt to mitigate overall losses to the parties directly involved.

A comment from a Kekaha community resident (Earth Tech 2007) seems to indicate that direct dialogue between the landfill host community of Kekaha and the sponsoring agency, the County of Kaua'i DPW should be initiated in regards to HCC. The Kekaha resident commented:

Environmental justice is a movement promoting fair treatment of people of all races, income and cultures with respect to development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative impacts such as having the landfill nearby the community of Kekaha and therefore impacting the constituency (every man, woman and child) of the community.

As such, if the imposition of maintaining the solid waste landfill where it is for an extended period of time and creating a cumulative negative impact on the community, appropriate compensation should be made to the community for having that burden imposed upon them. The community can come up with a number of proposals which can be submitted to the appropriate officials.

HCC is a way to offset this sense of being disproportionately impacted. At least five states mandate host compensation for solid waste landfills and dictate minimum compensations (Georgia, Massachusetts, New Jersey, Pennsylvania, and Wisconsin) while other states incorporate HCC packages only at selected landfills.

Facility background information and the reasons why the County of Kaua`i should consider HCC in conjunction with their proposed lateral expansion of KLF is presented in the following section.



3. FACILITY BACKGROUND AND REASONS TO CONSIDER HCC

3.1 FACILITY BACKGROUND

The KLF is located 1.3 miles northwest of the town of Kekaha on the southwest side of the Island of Kaua`i and identified with Tax Map Keys 1-2-002:009 and 1-2-002:001. This facility is situated on approximately 98 acres of land and comprises two distinct refuse fill areas identified as Phase I, approximately 33 acres, and Phase II, approximately 32 acres. The KLF is bounded by Kaumuali`i Highway to the northeast, an unpaved access road and agriculture land to the southeast, a state agricultural park to the northwest, federal reserve lands to the west, the Hawai`i National Guard Rifle Range to the southwest, and a drag strip to the south

 The County of Kaua`i opened the Phase I landfill in 1953, and accepted solid wastes at the facility until operations ceased on October 8, 1993.

Phase II began operations on October 9, 1993 after the closure of Phase I. Phase II of the KLF was constructed to meet RCRA Subtitle D criteria and is currently the only active, permitted municipal solid waste (MSW) landfill on the Island of Kaua'i. Phase II was initially permitted for a maximum elevation of 37 feet above mean sea level (msl). However, to accommodate waste generated by Hurricane Iniki in 1992, a vertical expansion was required and approved in 1998 raising the maximum fill elevation to 60 feet above msl. The first vertical expansion added an additional 6 years of use to the site (Belt Collins 1998). A second vertical expansion was subsequently required and approved in 2005 to raise the maximum fill elevation to 85 feet above msl. The Phase II fill area is expected to reach capacity by approximately January 2009. Therefore, the County is now proposing to expand the limits of the Phase II fill area to include three additional cells. Cell 1 would expand the Phase II fill area into the existing leachate lagoon and adjacent acreage. Cell 2 would expand the Phase II fill area into the valley area between the closed Phase I landfill and the existing Phase II landfill. Cell 3 would expand the Phase II fill area directly over the closed Phase I landfill. Maximum height of these areas would be no greater than 85 feet above msl. The proposed expansion at fullbuild would increase the original Phase II fill area by approximately 32.7 acres and would provide capacity for an additional volume of approximately 1,550,000 cubic yards of MSW at the KLF. At the current filling rate, this would accommodate approximately 12 years of MSW filling operations. This expansion would provide the County with adequate time to site, design, and construct a new MSW landfill for the Island of Kaua'i.

3.2 REASONS TO CONSIDER HCC

An environmental assessment (EA) was prepared per the Hawai'i Revised Statutes Chapter 343, *Environmental Impact Statements*, and the HAR Title 11, Chapter 200, DOH implementing rules for the environmental review process. The Notice of Availability (NOA) was published in the *Garden Isle* on July 22, 2007 and the Office of Environmental Quality Control's (OEQC) *Environmental Notice* on July 23, 2007. This NOA announced the availability of the Draft EA and the 30-day public comment period of July 23, 2007 through August 24, 2007. In addition, a public meeting was held on August 9, 2007. The meeting was announced in the *Garden Isle* on August 6, 2007. During the public comment period, many community members, agencies, and residents of Kaua'i expressed that they are disappointed at the prospect of having Kekaha Landfill expanded for another 14 years. Examples of some of these comments are:

"How is the county going to fulfill their duty to the Kekaha people for the injuries that was done to them in the past? How are they going to make sure that the primary goals enacted by Congress in 1976 were faithfully acted upon. How are the minds of the long time residents of Kekaha, those who lived there since 1976 and who lived with the landfill for 54 years are going to be protected from what already has been damaged? These people have carried the "burden" of the landfill too long not to be compensated for the loss of their dignity. They have been mistreated and taken advantage of. Too many people have died of cancer and suffered birth defects from the hazards of waste water seepage into the water tables of



the communities in Kekaha Gardens. How will this be prevented from reoccurring in the future?"

- "The mentality that people will allow continuation of being impacted on the west side while million dollar homes and resorts are built in other locations impacts all that have lived on Kaua`i longer than since Hurricane Iniki. The mentality that chemicals and waste will continue unabated on this island is hazardous to the lifestyle of an island. This island is not big enough to continue such disrespect for the land or the people living on the west side."
- "For this proposal to be a win-win situation there must be an honest, forgiving, and
 willingness of aggressive collaboration efforts between governments and communities to
 share in the burden, responsibility, development, and improvement of the solid waste
 management system."
- "Equally surely the Kekaha community does not deserve another 14 years of life with an
 ever-growing garbage dump in their backyards. Environmental justice concerns for a
 predominantly Hawaiian community must be addressed. At least one alternative should
 include the use of only one or two cells, a more limited lifespan for the landfill, and a
 commitment on the County's part to find a replacement site within a reasonable timeline."
- "The continued, neglectful impacts to the Kekaha community by these ever-extended actions
 on adjacent Ceded Lands constitute substantial impacts on the economic and social welfare,
 and the cultural practices of the Kekaha community. This draft EA addresses potential
 impacts on the wider Kaua`i community, which the County has only estimated to be negative
 if they are left to deal with the mess that the County, not the Kekaha community, made by
 not planning appropriately."

Based on the comments received, the County of Kaua'i decided to conduct this study on HCC. The first phase of the study was an extensive research with one key interview regarding HCC efforts around the country to determine typical host community concerns and mitigation options, community involvement, types of HCCs, and lessons learned. The research (including an interview) conducted for this study is summarized in the following section.

4. RESULTS OF RESEARCH CONDUCTED

4.1 CASE STUDIES

Much research has been accomplished regarding landfill siting; however, limited research exists regarding the factors that influence selection of various HCC packages. Two widely distributed papers on the subject are *Host Community Compensation and Municipal Solid Waste Landfills* (EPA 2002) and *Winning When You Have Lost: Cutting your Losses with Host Community Benefits* (Cornell 1993). These papers are included as Attachment A and Attachment B, respectively.

4.1.1 The EPA National Center for Environmental Economics Paper

The EPA paper (EPA 2002) focused on factors influencing the community bargaining position and compensation packages received by host communities of the 104 largest U.S. privately owned solid waste landfills in 1996. Table 1 (EPA 2002) summarizes the various types of compensation received by the landfill host communities.

Table 1: Percent of Communities Receiving Various Types of Compensation

Type of Compensation	% of Host Communities
None	52
Monetary, per ton of waste received	31
Monetary, percent of revenue	4
In-kind gifts	16
Free collection, disposal, or recycling	11



Preferential hiring or reimbursement for negotiation expenses 3

Note: In some cases, host communities received more than one type of compensation; thus, the total percentage in the Host Communities column adds up to over 100 percent (%).

The majority of host communities received no form of HCC. For the host communities that did receive HCC, the most popular form of compensation was monetary. Approximately 35% of host communities received monetary compensation based on the amount of waste received or a percent of the revenue generated. In-kind gifts such as ball parks or collection trucks are normally given in addition to some other type of compensation; approximately 16% of the host communities received in-kind gifts. Approximately 11% of the communities received payment in the form of services provided such as free or reduced collection and disposal rates and 3% of the host communities received preferential hiring or negotiation expense reimbursement.

The EPA paper tried to determine the degree of influence that a number of variables had on the type of compensation packages received; the variables evaluated include eight risk and quality of life variables, four firm bargaining variables, four community bargaining variables, and eight socio-economic variables. Two hypothetical situations were considered in the EPA study: 1) compensating the host community, and 2) compensating the county. Since compensating the county is not applicable with this situation, only the situation compensating the host community is summarized below.

The eight risk variables were:

- proximity of landfill to nearest subdivision
- use of well water
- population of the community
- whether the landfill accepts out of state waste
- whether the landfill accepts asbestos
- whether the landfill accepts soil
- whether the landfill accepts sludge
- whether the landfill accepts tires

Two of these variables were found to be significant contributors to increasing the value of host compensation packages: 1) distance between the landfill and nearest subdivision, and, 2) whether the landfill accepts tires and sludge.

The four firm bargaining variables were:

- tipping fee
- annual tonnage accepted
- whether the landfill was owned by one of the big three; Browning Ferris, Laidlaw Waste Systems, or Waste Management, Inc.
- whether the owner and landfill were located in the same cities

The most significant finding was that if a landfill was owned by one of the "big three" the compensation packages were more valuable.

The four community bargaining variables were:



- degree of citizen involvement in the negotiation process
- percentage of the voting population that voted in the 1996 presidential election
- whether it was a replacement landfill in the same community
- whether the landfill was located in a state with mandated compensation

Three of the four were substantially significant factors, which contributed to a higher value of the compensation packages: citizen involvement in the negotiation process, whether it was a replacement landfill, and whether it was located in a state that mandated payment.

The eight socio-economic variables were:

- race
- income
- percent of population living in poverty
- whether the host fee was paid to the city or county
- northern geographical location in U.S.
- southern geographical location in U.S.
- eastern geographical location in U.S.
- western geographical location in U.S.

The most significant socio-economic variable contributing to the HCC package value was location. Host communities in the Midwest received much higher valued compensation packages than other regions of the country.

The findings suggest that communities have a better chance of success when they are more involved in host fee negotiations and when they are more knowledgeable about the issues surrounding hosting a landfill as well as about the existence of host compensation. To increase the readiness of communities to sit down at the bargaining table, policy makers should target their efforts at improving citizen education and involvement (EPA 2002).

4.1.2 The Cornell Waste Management Institute Fact Sheet

The Cornell Waste Management Institute Fact Sheet (Cornell 1993) discusses the benefits of developing the public communication and education process as early as possible when considering landfill development options. A community well-educated on landfill issues and with open communication channels to the landfill agencies will more readily sit down at the bargaining table and discuss how they can cut their perceived losses with a compensation package.

The fact sheet includes a table summarizing the results of public opinion polls conducted in two New York state counties regarding preferred benefits to include in a compensation package. Eight of the top ten preferred benefits for both counties were identical and included:

- quarantee to replace water
- free water tests
- hire own property appraiser
- · monitoring well reports

- landscaping
- · restricted operating hours
- local inspector
- · enforce speed limits

Rounding out the top ten for one county were property value protection and creation of a special contingency fund. Rounding out the top ten for the other county were extending public water lines



and controlling litter. Since the 1993 fact sheet was prepared, some form of monetary compensation in HCC packages has become increasingly popular.

The fact sheet also includes a case history for one of the counties discussed above: the county operated landfill in Tompkins, New York. Although the landfill was eventually abandoned due to wetland issues and reevaluation of priorities, the case history provides an illustration of how to introduce and implement the HCC concept.

4.2 INTERVIEW

An interview with Ms. Jane Furst, Legal Secretary with the State of Wisconsin Waste Facility Siting Board, was conducted as she was identified during the initial research as an individual heavily involved and knowledgeable of HCC and the siting or expansion of landfills. She indicated that Wisconsin enacted a law in 1982 that recognized the need for landfill is non-negotiable; however, an HCC negotiation with the host community is mandatory. She described that there is a mandatory membership for a local negotiating community, which is the Citizens Advisory Committee that includes the following individuals:

- 4 members from the host community
- 2 members from the county
- 2 members from the community residing within 1,500 feet of the landfill

She also sent copies of some successfully negotiated Landfill Agreements. These are included in Attachment C.

4.3 TYPICAL HOST COMMUNITY CONCERNS AND MITIGATION OPTIONS

The importance of educating the public cannot be over emphasized. An educated host community can distinguish between risk and inconvenience and understand how mitigation measures can reduce or eliminate risk and inconvenience. The experiences and knowledge of a community already hosting a landfill should be a benefit when it comes to negotiating a compensation package.

Table 2 presents a compilation of typical inconveniences felt by landfill host communities.

Table 2: Typical Landfill Inconveniences and Mitigation Measures

Typical Inconveniences	Typical Mitigation Measures
Noise	Natural barriers, designated routes, vehicle monitoring, and days/hours of operation
Odor	Active gas control systems, daily cover, and proper operation
Dust	Vegetative covers, water trucks
Litter	Fencing, scheduled litter patrol, daily cover, and wind direction consideration
Mud tracking	Paved access roads, watering trucks, and street sweepers
Vectors (rodents, birds and insects)	Weed and grass control, eliminate ponding, exterminators and rodent baiting
Speeding	Law enforcement and tiered complaint system
Road deterioration	Regular maintenance and tiered complaint system
Loss of development potential	HCC and proposed use after closure
Visual impacts	Berms, landscaping, vegetation, aesthetic screening, and post-closure monitoring plans

Table 3 presents a compilation of typical concerns that landfill host communities have regarding the siting of the landfill in their community. These fears, although perhaps unfounded, need to be considered seriously by the landfill owner/operator. If the public understands and trusts in a mitigation measure, there should be minimal fear resulting from perceived risk.



Table 3: Typical Landfill Concerns and Mitigation Measures

Concern	Mitigation Measures
Decline in property value	Property value guarantees
Groundwater contamination	Landfill liners, leachate collection systems, and groundwater monitoring
Uncertainty about future environmental problems	Public education
Distrust of technology	Public education
Concerns not heard	Communication channels and citizen action committees
Promises not kept	Trust building
Water drainage and erosion control	Proper grading, silt fencing, vegetation, and maintenance
Fire/Hazardous incidents	Emergency management plans and response services

The manner in which inconveniences and concerns are addressed varies greatly from host community to host community. Although it is recommended to keep HCC package negotiations separate from landfill siting decisions, the HCC package details most often are documented in the landfill negotiation document.

4.4 COMMUNITY INVOLVEMENT

The key to a successful HCC package is to get the community involved as soon as practicable, the sooner the better.

4.4.1 Citizen Advisory Committee

A Citizen Advisory Committee (CAC) should be formed and become the focal point for public participation in local government decisions with goals to protect and enhance the local environment. The membership should comprise concerned citizens with a variety of educational and professional backgrounds and be representative of the community. Some boards include government members from the local department of public works or waste management and the department of health. Other boards feel that government membership constrains their discussion process and choose to have a disinterested third party. Key components of community involvement include:

- Broad membership
- Getting information to the public on options available for the HCC package
- Conducting surveys of residents and property owners
- Having direct access to the powers that be (County of Kaua`i DPW, other local and state
 officials, landfill operator, appropriate community members, etc.)

The sponsoring entity for a survey can be either the county or the CAC; however, the survey should be conducted by a disinterested third party. Building trust and encouraging open communications is critical to the success of community involvement. There are many constraints on reaching the whole community through public meetings such as work hours, fear of public speaking, and transportation issues. A survey can help fill the void.

4.4.2 Finding the Right Balance for Your Community

There is great need to mitigate the sacrifices of and perceived threat to the host community and balance against the reverse benefits to the non-host communities who some feel benefit from use of the landfill but not having to have it located in their community. The benefits of a HCC package for the host community assist in balancing this perceived burden.

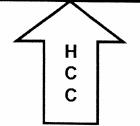


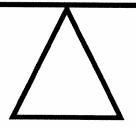
Host community

Perceived sacrifices and threats to limited population

Non-host community

Perceived benefits to the greater population





The Balancing Act

4.5 TYPICAL HCC

During the research part of this study, it was determined that typical HCC packages include the following types of compensation:

- Wellhead protection, private well testing and monitoring, and/or water main extension
- Property value protection and/or agreements to guarantee property value
- Fire responsibilities
- Direct lump sum or annual payments to area residents/affected property owners
- Community funds where lump sum or regular payments are made to the municipality for the benefit of local residents
- Tax breaks
- Service guarantees such as community/commercial/school districts recycling facilities and/or limited free disposal of solid waste and yard waste privileges and/or electronics recycling
- · Tonnage based payment
- · Parks/recreation facilities
- Landfill jobs
- In-kind gifts where the developer provides or pays for local community facility improvements, improvements to local environment and wildlife habitats, sponsorship of local groups and teams, school and educational support, etc.
- Hiring of local contractors during construction
- Retroactive compensation fees, especially in the case of expansions that may occur
 because of changes in what had been portrayed to the public (like their landfill would be
 closed and a new landfill would be sited somewhere else)



4.6 Perception of Bribes or Benefits

Avoiding or minimizing the perception of a bribe is critical to the success of the HCC and must be considered by the landfill owner. The overall cost of HCC packages is very low when compared to the costs of developing a new landfill.

The manner in which the HCC is presented to the host community needs to identify the partial win situation in the minds of the community to avoid the perception that the HCC is a bribe offered for the sating of a new landfill or the expansion of an existing landfill. The landfill owner needs to ensure that the community feels some benefit to at least some of the "perceived" loss resulting from a landfill siting or expansion decision.

The landfill owner also needs to recognize the win that the non-host communities are experiencing from not bearing the burden of a landfill in their backyard. One way to do this is to have these communities bear some burden through additional taxes or user fees to compensate the host community.

The landfill owner needs to demonstrate a very serious and sensitive consideration for the residents' concerns; the community needs to feel they are being treated equitably and fairly. In order to foster a sense of better, more equal relationships between residents and decision makers, the decision makers need to involve the community in a participatory role.

4.7 LESSONS LEARNED

During the HCC research, the following "lessons learned" were identified:

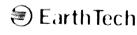
- Form a CAC early on in the process, the earlier the better
- Build trust
- Be open and honest
- Communicate regularly
- Conduct informal and open negotiations to avoid suspicion of impropriety
- Consider the community's feelings and be sensitive to local perceptions and concerns
- Target specific benefits to specific concerns
- Conduct surveys by a neutral third party; these show serious consideration of local benefits
- Keep in mind that HCCs will not stop opposition or law suits

5. RECOMMENDED APRROACH FOR HCC FOR KEKAHA

5.1 KEKAHA COMMUNITY CONCERNS

Based on comments received on the Draft EA for the KLF Phase II lateral expansion, the Kekaha community is concerned with the following inconveniences listed in Table 2: noise, odor, dust, litter, speeding, and visual impacts. Concerns regarding noise, odor, speeding and litter extend beyond the KLF boundanes to the primary roadways used to haul municipal solid waste through Kekaha.

The predictional concern amongst the community was with regard to groundwater contamination, and sharp the potential for groundwater contamination from the unlined Phase I landfill. The effect of the effective regarding potential releases of hazardous materials in the contamination from the phase II base liner, or the effective result of earlier of the Phase II base liner, or the effective regards that those releases would have on the Kekaha.



Comments received suggest that the Kekaha community does not trust that the technology and mitigation measures proposed will be fully protective of human health and the environment. Commenters also expressed frustration that their concerns have not been heard and that prior promises to site a new landfill away from Kekaha had been broken. Therefore, in entering negotiations with the Kekaha community, the County of Kaua'i DPW should understand that they will be negotiating in a high risk and low trust environment.

5.2 COMMUNITY MEETINGS

Based on the research and the interview conducted, the County of Kaua'i should form a CAC now; don't wait. The Final EAand the Finding of No Significant Impact determination will be announced in the November 23, 2007 OEQC *Environmental Bulletin*. This would start the 30-day legal challenge period. There has been no open dialogue with the community of Kekaha since the County of Kaua'i hosted a community meeting on August 9, 2007 held at the Waimea Neighborhood Center. So, the first priority would be to hold another community meeting at the Kekaha Neighborhood Center since there was complaint about having the meeting in Waimea instead of Kekaha. The meeting should be well published in the *Garden Isle* starting at least 2 weeks prior to the meeting to give people ample time to place it on their schedules, as there were complaints that the initial meeting was not published and only 2 days notice was given. Notices or flyers could also be posted in establishments in Kekaha such as the Neighborhood Center, churches, and/or market.

The objective of this first community meeting would be to start building trust and open dialogue. To meet this objective, it is recommended that the County of Kaua`i conduct the following:

- Thank the community for their comments on the Draft EA for the proposed lateral expansion of the landfill
- Indicate that all comments were taken under consideration and responses to comments have been prepared and have copies of the Final EA available
- Indicate that, based on the comments received, the County hired a consultant to conduct a study on HCC options
- Explain what HCC is and that the County would like to form a CAC to open dialogue with the community on their ideas regarding HCC
- Explain that information dissemination will be conducted at routine intervals during the
 development of HCC options for the residents of Kekaha. This may be through mailers, the
 County website, and subsequent community meetings.

5.3 CITIZEN ADVISORY COMMITTEE

The committee should comprise concerned citizens with a variety of educational and professional backgrounds and be representative of the community. The committee should consist of the following individuals:

- One Kekaha educator
- One Kekaha business man or woman
- One Kekaha politician
- One Kekaha retiree
- Two general Kekaha concerned citizens
- Two representatives from the County of Kaua'i DPW
- One representative from the Mayor's office
- One representative of the landfill



- One representative of the consulting firm that conducted this study
- A neutral third party facilitator, such as Gary Omori, who is used quite frequently for community involvement projects on Kaua'i

The reason it is recommended that the facilitator of the CAC be a neutral third party, not a County employee or consultant involved in the landfill expansion, is because otherwise the community may feel that they are being bribed or their concerns are not really given serious consideration. Once a committee is formed, it is recommended that the Kekaha committee meet to discuss types of compensation to consider and to then survey the community. These are outlined below in Sections 5.4 and 5.5, respectively.

5.4 Types of HCC to Consider for Kekaha

Once the committee is formed, they should meet to decide what types of compensation they would like to consider for inclusion in the community survey. Based on the comments received on the Draft EA, the community would be most receptive to the following types of compensation:

- · Wellhead protection/private well testing and monitoring
- · Direct lump sum or annual payments to area residents and affected property owners
- Community funds where lump sum or regular payments are made to the municipality for the benefit of local residents
- In-kind gifts where the developer provides or pays for local community facility improvements, improvements to coastal recreational areas, sponsorship of local groups and teams, school and educational support, etc.
- If and when the County of Kaua`i initiates curb side recycling, the community of Kekaha would be among the first communities to receive this service
- Tax breaks
- Service guarantees such as community/commercial/school districts recycling facilities and/or limited free disposal of solid waste and yard waste privileges and/or electronics recycling
- Tonnage based payment
- Parks/recreation facilities
- · Hiring of local contractors during construction

There should also be early discussion establishing the purpose of the community fund "for the benefit of the community". There is unlikely to be a consensus as to what the community as a whole considers as a benefit. The concept of community benefits is principally about providing gain for the entire community, rather than enriching individual members within it. If the chosen purpose of a fund involves direct financial benefits to individuals, it is important to ensure that the reasons are clear and consistently applied. On the other hand, the fund could be used to develop a "community asset" such as the in-kind gifts explained above, in which case the CAC must decide which gift serves the community best as a whole. This involves discussions and negotiations on how to determine the purpose of the funds as the fund is being set up.

The benefit of being more specific at this stage is that it reduces the potential for disagreement later. These are all items of consideration that the committee should discuss early on and incorporate into the community survey, as appropriate.

The value of compensation packages that incorporate monetary compensation on a per tonnage basis vary widely between communities. However, per tonnage rates of compensation are typically between \$1 and \$3 per ton. Assuming that the rate of refuse acceptance for the KLF Phase II lateral expansion would be approximately 248 tons per day, the expected rate of compensation would



range between \$88,288 and \$264,864 per year (Table 4), with annual upward adjustments of 2% to 4%.

Table 4: Estimated Value of Per Tonnage Compensation for Kekaha

Per Tonnage Payment	Days of Filling Per Year	Rate of Refuse Acceptance (tons/day)	Annual Compensation
\$1.00	356	248	\$88,288
\$2.00	356	248	\$176,576
\$3.00	356	248	\$264,864

5.5 SURVEYING THE COMMUNITY

The next item of business that the committee should consider is the distribution of a community survey to: 1) ensure that the public comments received on the Draft EA accurately reflect the concerns of the larger Kekaha community, and 2) understand what forms of compensation the Kekaha community would be most interested in receiving. The CAC should consider following the steps below when creating and administering the survey:

Step 1: Identify the Information the CAC is Looking For

The CAC should make a list of the information that they would like to receive from the survey. Write down the committee's goals for each piece of information and why finding it out is necessary. Determine within the committee the most important information to find out. This will help narrow down what to ask and how. Often times a survey becomes too long and many questions have to be cut out. Taking the time to prioritize the information you are looking for will help to shorten the survey. Prioritize those items that will give you the information you are looking for.

Step 2: Designing Your Survey

Once the committee has narrowed down the information to receive from the survey, they should take the time to develop the questions that target the desired information. A guideline for this step is to look through other surveys designed for communities or projects similar to the one you want to survey to get ideas of ways a question can be asked. Question design tips include:

- Keep your language direct, use common words. If an uncommon word is used, provide a definition.
- Close-ended questions (Yes/No, True/False, Multiple Choice) receive the highest response rate. Close-ended questions narrow the range of answers and make it easier to compare your responses later.
- Be very specific.
- Avoid questions that can be answered with "I don't know".
- Do not combine two questions into one.
- Stay away from questions with multiple answers (i.e., *Circle all that apply*). These will be more difficult to work with when you are analyzing your data.



- Adding a "What else do you want us to know?" is a useful way to end a section or survey.
- The length of the survey should be kept as short as possible while still gathering the necessary information. Typically, surveys should not take longer than 15 minutes to complete.
- Avoid long introductions; the introduction should be short and name the organization doing the survey. It should also include how the information gathered will be used and let people know it is anonymous and/or confidential.
- The first questions will set the tone for the survey. The person should feel that they have something to contribute. By making the first few questions relatively easy to answer, you may have a higher success rate of getting surveys completely filled out.
- Don't leave the most pertinent questions for the end. Many surveys never get completely filled out.

Step 3: Testing Your Survey

Before conducting the survey, the CAC should test it on at least 5 to 10 people who are not familiar with the survey or directly involved in the project. The CAC should review the questions answered, not answered, and how they answered them. If it appears that certain questions gave them problems, were unclear, or did not get a response, ask the respondents which questions didn't make sense or were difficult to answer; then refine the survey. Again, keep track of the time. If it took the survey testers longer than 15 minutes to complete, it is too long.

Step 4: Analyzing Your Data

After the completed surveys have been collected, it is time to analyze the data. Data can be analyzed by entering it into an Excel spreadsheet and computing the numbers or by using a statistical software program. If someone has not responded to a question, do not assume they would have answered as the majority. Only consider information that has been actually answered. It is also useful to take note of those questions not answered and try to determine why. If possible, it would also be useful to debrief a representative group of the respondents, say 10 percent, to find out what their thoughts about the survey were, what was difficult, and what seemed to work.

The committee should then host another community meeting to present the results of the survey with the community.

6. ADMINISTRATION OF FUNDS

Successful HCC packages should have the following:

- Clear and enforceable agreement by the County of Kauai regarding the benefit to the community of Kekaha;
- A mechanism for ensuring the HCC agreement continues irrespective of County of Kauai officials involved;
- A clearly defined purpose for the funds; and
- A well defined, reliable, and accountable approach to managing and distributing the funds involving County of Kauai and local Kekaha officials with clearly documented procedures.

This section examines different approaches to achieving this goal.



The agreement to secure the community benefits should be formalized in a legal document to minimize the risk of future disputes and protect both the developer (County of Kauai) and the Kekaha community from the risk of misunderstanding.

The CAC would need to choose an entity (such as one listed below) to administer the compensation package. Community funds need to be controlled and managed by an organization that is, in some way, rooted in or answerable to the Kekaha community and have credibility within the community. Potential entities include:

- Sponsoring entity (County of Kaua`i)
- Mayor's office
- Local Kekaha community
- Separate body formed specifically for the purpose of administration
- Local charitable company
- Trust
- A combination of the above

Establishing clear systems for control and management of the money is very important. There are a number of questions which need to be answered including:

- Who can decide to spend the money and on what basis?
- How are potential conflicts of interest handled?
- Who authorizes payments from the bank and how is this monitored?
- What record keeping and audit procedures are in place?
- What happens to money that hasn't been spent? Is there an investment strategy?

It is important that the control and management of the funds be clearly documented to avoid the risk of fraud or embezzlement. By clearly establishing who, what, and how the funds are controlled and managed is essential for maintaining a successful HCC package.

7. CONCLUSIONS AND RECOMMENDATIONS

Clearly there are many approaches to take when it comes to HCC within a community. The most important aspect is establishing trust and open communication within a community prior to attempting such an endeavor. To be successful, this relationship should be initiated in the early stages of a proposed project. Based on the research conducted and the concerns of the community of Kehaha with the proposed expansion of the Kekaha Landfill, the following steps are recommended:

Step 1: Conduct a community meeting at the Kekaha Neighborhood Center

Step 2: Establish the CAC by soliciting individuals from the list provided in Section 5.3

Step 3: Identify reasonable HCC options for the community of Kekaha

Step 4: Create and test a community survey

Step 5: Conduct the community survey

Step 6: Analyze the data from the community survey



Step 7: Conduct a community meeting to present the results of the survey

Step 8: Establish appropriate HCC for the community

Step 9: Establish the entity to administer the HCC package

 ${\mathscr I}$ Step 10: Establish a system to control and manage the funds within the HCC package

By following these 10 steps, a successful HCC program in relation to the proposed expansion of the Kekaha Landfill can be accomplished within the community of Kekaha.

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WINNING WHEN YOU HAVE LOST: Cutting Your Losses With Host Community Benefits

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Since few communities volunteer to host a new landfill, usually a government or private entity outside the impacted neighborhood decides where the new site will be and imposes its decision on an unwilling community. Perceived fears provide the basis for opposition: decline of property values and community image; groundwater contamination; loss of development potential; uncertainty about future environmental problems; distrust of technology; increased truck traffic and consequent road deterioration and littering, to name a few. Compounding the problem are a lack of trust in promises of safety, lack of faith in governmental regulations and oversight, and fear that officials are neither sensitive to nor understand neighborhood concerns.

The arguments for and against a site polarize communities. One wins if the landfill is located in another neighborhood; one loses if it is forced to accept the site. Rarely are issues of fairness and equity discussed, such as how all those who use the new landfill benefit from it and therefore should share its potential detriments. And conversely, how those who shoulder the burden to a greater extent are entitled to fair and equitable treatment and some consideration for potential impacts.

This Fact Sheet examines a method investigated or adopted by many communities in New York and elsewhere to address this controversy and provide some way for affected residents to face the reality of compromise in resolving a common problem.

Are you in the midst of siting a waste disposal facility? Is the facility being sited in your back yard? Or are you breathing a sigh of relief because the facility is going elsewhere? If you answered yes to any of these questions, you need to know more about Host Community Benefits.

How your community disposes of your garbage can be one of the most controversial issues debated today. Nobody wants garbage dumped in their back yard. The attraction can become even more contentious when waste from other communities as also involved. These controversies have become more the left as regulations have become a frozen forcer. Thus, forcing many

facilities to close. Public awareness and concern has heightened over perceived environmental, economic and social problems. Siting new waste disposal facilities has become costly as irate citizens block all attempts by others to discuss, inform or convince them that the facility not only will be safe, but is the best solution to an ever-growing waste problem.

Unfortunately, siting conflicts do not have a "win-win" solution for any involved parties—the local community, county or local government, or private industry. Host Community Benefits is an emerging concept to reduce the losses to all parties in the resolution of the siting controversy.



Host Community Benefits

The cornerstones of Host Community Benefits (HCB's) are compensation and mitigation. The moral and logical goals of the concept are equity and fairness. The attempt is to balance the need for safe disposal of solid waste with the sacrifices borne by a solid waste disposal facility's host community. Additionally, such programs give citizens a participatory role in the process.

To understand how HCB programs work, one must determine their personal stake. Here's how:

For those in the impacted neighborhood who feel powerless and threatened, the stake is the perceived risk of siting a facility in the vicinity. "Winning" means only one thing-to stop the siting of the facility. If they cannot stop it, they have "lost." Or have they? Initiation of an

HCB package after a site has been chosen is the only method of cutting losses. It ensures that you, your neighbors and your community will receive at least some compensation for the losses you feel are important.

For the county or private corporation, the primary stake is to succeed in siting the facility. If they alienate the public while accomplishing this goal, they will have "won the battle but lost the war" for the trust they need for future decision making, expansion or image building. Entering good-faith negotiations with affected citizens in

the development of an HCB package can help restore some of the trust. Even if a site is "lost," perceived sensitivity and openness in working with community representatives by responding to their fears will help maintain credibility for siting decisions and relations in the future and elsewhere.

For the citizens of the rest of the community or county who escaped the site, an HCB plan is the mechanism for reimbursingthrough taxes or user fees-the host neighborhood for the sacrifices it will bear.

Therefore, no matter what the situation, everyone is involved in one way or another; everybody both wins and loses. An equitable balance is sought.

Benefit programs are unrelated to specific site selection. Rather they focus on helping the community at large fairly and equitably manage its solid waste without penalizing a host community.

This discussion focuses on landfills, but the concepts can be applied to all waste management facilities.

A Balancing Act

Simply stated, the concept of Host Community Benefits aims to balance the sacrifices a local neighborhood and its individual citizens must bear in hosting the site of a waste management facility against the "reverse" benefits received by users of the facility who escape having it in their neighborhood, Various benefits can counterbalance perceived and real threats to public health; the social, economic and physical environment and individual rights.

In return for hosting a new landfill and accepting negative impacts,

Preferred Benefits

This table lists the benefits preferred and those rejected by citizens responding to public opinion surveys undertaken in Tompkins and Onondaga Counties, New York.

Onondaga County Landfill (Van Buren) **Top 10 Choices Top 10 Choices Benefit** Percent Favoring Benefit Percent Favoring G

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Free Water Tests	95%	Guarantee to Replace Water	88%
Guarantee to Replace W	ater 92	Extend Public Water Lines	88
Enforce Speed Limits	92	Hire Own Property Appraiser	87
Hire Own Property Appra	aiser 92	Control Litter	87
Monitoring Well Reports	90	Free Water Tests	83
Property Value Protectio	n 89	Landscaping	82
Landscaping	88	Monitoring Well Reports	80
Restricted Operating Ho	urs 87	Restricted Operating Hours	77
Local Inspector	83	Local Inspector	75
Special Contingency Fur	nd 82	Enforce Speed Limits	75
Bottom 10 Choices		Bottom 10 Choices	8

Bottom 10 Choices

Tompkins County Landfill (Dryden)

Community Festival	26	College Scholarships	19
Neighborhood Pool	27	Free Water	21
College Scholarships	29	Wildlife Ponds	26
Park/Playground	30	Housing Loans	31
Support Community Center	41	Reduce County Taxes	34
Public Sewer Lines	45	More Landfill Entrances	38
Payments to Town	47	Support Ambulance	41
Landfill Job Priority	50	Free Town Garbage	41
Public Water (by opening date)	50	Payments to Town	44
No Private Construction Disposal	53	Support Fire Service	48

the host community is entitled to certain benefits. Hence, the concept of benefit sharing applies to the whole community: the neighborhood near the landfill is given benefits to ameliorate the impact of the nearby landfill, while the rest of the community receives the benefits of a new landfill without having it close by.

Mitigation

Mitigation refers to reducing problems and impacts that the host community believe may be caused by the landfill. Acting as a preventative maintenance incentive, it is also a way of encouraging compliance by the operators of the landfill with agreed-upon protective measures and operating procedures. Mitigative measures involve guarantees of costly remedial actions that do not kick in unless contamination occurs due to sloppy management. To avoid this possibility, landfill operators are stimulated to manage it so as to avoid these costs kicking

Mitigation addresses the dangers and fears of drinking water contamination, deterioration of highways, littering, odors, noise, visual eyesores, vermin, and reduced property values. By providing free water testing and guaranteed replacement if contamination is found is one example of how drinking water contamination can be mitigated.

Compensation

Compensation means providing some kind of direct payment (usually money or services) to offset the intangible effects of the landfill, such as a blemished community image and lower quality of life.

Compensation benefits can be to the form of cash payments to the hard community's government, tax throaks, extra support for fire and ambulance services, free garbage

pickup, new parks, and offering landfill jobs to local residents. Often, however, such benefits are perceived as bribes to buy off the community.

Flexibility

The process of determining an HCB plan is inherently flexible. It is as individual as each host community. Since each community has its own unique demographics, geography, and economic climate, the benefits to be gained are negotiated depending on the needs and character of that community. No two HCB packages are alike. Examples of preferred benefits are shown in the table to the left.

It is crucial to remember that negotiating HCB's will not remove opposition to landfill siting. It is better if HCB's are negotiated separately from the siting controversy itself. Otherwise HCB's may become entangled in the siting process, and used as weapons during an antagonistic process, making negotiation futile. Opponents may view HCB's as unacceptable bribes, undermining their opposition to a landfill site. Still, pursuing an HCB program is useful since opponents can use HCB's as a contingency plan should their efforts to prevent siting fail.

Citizens Advisory Committee

Citizens Advisory Committees (CAC) are a critical part of Host Community Benefits. Through them, citizens feel recognized and respected; they understand that they are part of the process and thus are empowered to participate. Two types of CAC's are important: generic and site-specific. This two-track system is attuned to the needs of both the larger community and the affected neighborhood, as well as to the different stages of the siting process.

A generic CAC is useful in the early stages of siting, before a spe-

cific site is chosen. It should have broad membership providing general citizen input to all aspects of the siting process, including the site search.

The CAC develops a generic HCB plan as a starting point for negotiating a more specific HCB program with the impacted community after a site is chosen. The generic CAC becomes the vehicle for providing public information on benefits to be considered and how they might be applied. Public opinion surveys may be conducted to obtain or verify public attitudes on solid waste issues, including HCB's.

After a site has been selected, the formation of a site-specific CAC can refine the generic HCB program to reflect the concerns of the affected neighborhood, who too often feel shut out, ignored or devalued. Frustration over feelings of impotence in the decision-making process is an important component of public reaction in the impacted community. To maintain credibility, the affected neighborhood should have dominant representation on this CAC.

Both types of CAC's must be officially recognized and have membership from, or at least access to, governmental planning, public works and health department staff to benefit from their expertise. If this is not possible or desired—the CAC may feel these experts' interests conflict with those of the committee—funds can be provided to the CAC, or directly to the affected community, to hire their own technical experts and conduct their own studies of the proposed site.

Public Opinion Surveys

Surveying residents and property owners in the vicinity of the proposed landfill provides data useful in assessing community feelings and perceptions and determining preferred benefits. Usually commissioned by the sponsoring entity

or a CAC and conducted by a neutral third party, the survey asks residents and property owners what they think of proposed benefits, what course of action they recommend, and their opinion of solid waste issues. The data generated should be freely shared to build trust and encourage open communications.

Such surveys demonstrate that the facility sponsor or local government will seriously consider local concerns. They are also an effective public education tool to inform people about HCB's since these are usually poorly understood; people are often suspicious of their purposes.

Public opinion surveys also provide another mechanism for citizen input. Public meetings are of-

ten the only source of direct public input. However, public meetings require that those who participate actively by speaking have confidence in their speaking ability and the courage to stand up in public. Also.

due to time constraints, only a limited number of people can speak at any one meeting, thus limiting the public's input into decision-making. A well-designed survey gives everyone equal opportunity to provide input unhampered by the pressures of public speaking.

Judging by surveys taken in various communities around New York State, the public's views are remarkably similar. For example, surveys undertaken in Chenango, Onondaga and Tompkins coun-

ties—which have markedly different characteristics—indicated that people shared the same attitudes about host community benefits.

The conclusions of the public opinion survey concerning the proposed Van Buren Landfill in Onondaga County are indicative of statewide public opinion. "An examination of the responses to the questions leads to one conclusion," states the survey's Final Report. "Respondents to this study present an overall picture of rational concern: They are interested in preserving their environment as it now is-both natural and economic. They (like all of us) desire some control over the events which are impacting on their lives. Their belief in technology (technical safeguards to prevent water contamination, for

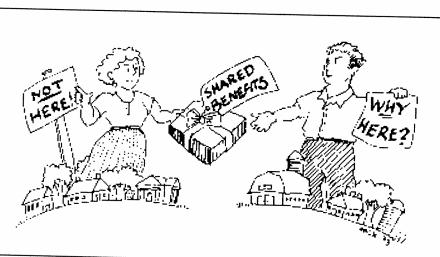
and fears is vital to the success of negotiations. Specific benefits can be targeted in response to specific fears.

Equally important in the negotiating process is determining who will be eligible to receive benefits. The impact area can be rigidly defined by drawing lines on a map or more loosely defined depending on meeting certain criteria in order to receive benefits, regardless of location. In the latter case, different criteria can be applied to different benefits. For example, threats of water pollution are more critical downhill from the site as opposed to uphill, while loss of property values may depend on access roads or wind patterns.

Administration

Afternegotiations have produced an HCB agreement some entity must be designated to administer it. This could be the sponsoring entity, the local community, a separate body specifically formed for the purpose, or some combi-

nation of these. Whatever the composition of the administering body, to be successful, it must have **credibility** within the affected community. Following a protracted or contentious dispute or litigation, the impartiality and credibility of the administering agency becomes all the more important.



example) is limited. But their approach to solving the problem is, for the most part, a rational one." (Some results of the survey are shown in the table on page 2.)

Negotiation

To avoid suspicion of impropriety, negotiation of HCB's should be informal and open. Again, it is crucial that negotiations represent the community's feelings.

Sensitivity to local perceptions

Benefits of HCB Programs

A Host Community Benefits program can accomplish several goals

Case History

The experience of **Tompkins County**, NY illustrates the HCB concept. This Central New York county (located midway between Syracuse and Binghamton) began consideration of a new county-operated landfill in 1985. A site was selected by the county in 1987 and implementation of benefits in the affected community began in 1989.

Initially the HCB concept was introduced to county officials, who were receptive to the concept and supported further discussion. HCB's were introduced to the public at several meetings on solid waste disposal issues.

Following a year and a half of quiet discussion and networking about the concept, one town supervisor (whose town included potential sites preliminarily identified by the county) proposed a detailed HCB program to the county solid waste committee. Subsequently, other towns proposed HCB plans.

The county Board of Representatives passed a resolution committing the county to negotiate a benefits program with the selected community. The resolution contained provisions for off-site well monitoring, creation of a citizens advisory committee, guaranteed potable water, property-owner compensation against adverse impacts, property value protection, financial compensation for the host town, and recycling and waste reduction programs. This resolution was passed six months before a site was selected.

Once a site was selected a Citizens Advisory Committee was created by the county from a list of people identified by community residents, citizen leaders and local officials. The committee was composed of 11 voting members: 2 selected by the affected town, 1 selected by a neighboring village, 5 selected by the county to represent landfill neighbors, 1 representative of the county board, and 2 selected by the county as at-large members. In addition, the county appointed the planning commissioner, public works commissioner, solid waste manager, assessment director, and environmental health director as nonvoting members.

A compensation task group was created to draft a more detailed HCB program. One of their first recommendations was to undertake an opinion survey of the affected neighborhood. The survey, paid for by the county and conducted by Cornell University, polled all property owners on the assessment rolls and all renters who could be identified within two miles of the proposed site—67% of property owners and 23% of rental households responded. In addition to gathering data on the affected community, the survey informed residents about the benefits program and guided the county in developing an acceptable plan.

The benefits preferred by respondents to the Tompkins County survey are listed in the table on page two.

Cornell Cooperative Extension of Tompkins County developed a countywide educational program on solid waste issues, including HCB's. County residents gave the presentations, not county officials (though a county official was on hand to answer questions), to several towns at well-attended public meetings.

A Neighborhood Protection Committee was created to implement the HCB program. The committee reviewed all requests for benefits and recommended appropriate action. The landfill was delayed due to wetland issues and continued reevaluation of priorities, and has now been abandoned on the basis of cost changes. Property value protection had been only benefit in effect.

Other New York counties have taken action on HCB programs, including Broome, Chenango, Dutchess, Monroe and Onondaga. Interest in the concept is being expressed by officials in a growing number of other New York counties. The New York State Department of Environmental Conservation, in a technical assistance guidance document for siting waste facilities, emphasizes that an HCB program should be strongly considered.

but does have *limitations*. It provides a more equitable and fair response to affected residents. It epens communication channels between residents and decision makers and involves those who are impacted in the process.

Emitations of an HCB program

must be kept in mind. It will not stop opposition to a particular site nor will it stop lawsuits, although this may become part of the negotiations. Since it is best considered as a separate issue, it has little effect on the selection of a specific site.

Perhaps the greatest benefits of HCB programs are that they promote sensitive consideration of residents' fears and foster better, more equal relationships between residents and decision makers. In his book *The Community Development Process*, William Biddle found that

shared decisions are usually more actively supported by the community at large as well as being less prone to criticism or counter action by opposing groups.

The cost of HCB programs are low relative to the total cost of developing a landfill, particularly where mitigation (triggered by specific negative events) is favored over compensation (where funds are spent regardless of specific events).

A Host Community Benefits program directly addresses the fairness of competing interests between those who benefit from the new landfill and those who must live as its neighbors.

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